Extract from Hansard

[COUNCIL - Tuesday, 22 June 2004] p4012b-4012b Hon Jim Scott; Hon Kim Chance

WEST KIMBERLEY, GENETICALLY MODIFIED COTTON TRIALS

2026. Hon Jim Scott to the Minister for Agriculture, Forestry and Fisheries

In regard the proposed GM cotton trials by Western Agriculture Industries and the Department of Agriculture in the Kimberley, can the Minister inform the House -

- (1) Does the GM cotton seed contain B.thuringiensis transgenes?
- (2) If so, are the transgenes with the synthetic *crylAc* or the *crylAb* genes implicated in cattle deaths in Belgium?
- (3) Is the trial using the Mon 810 variety of CaMC35S promoter, which is implicated in the illness suffered by Phillipine farmers exposed to GM pollen?
- (4) If not, can the Minister inform the House of what type of cry protein is being used?
- (5) If it requires the use of a promoter, what type of promoter?
- (6) Have these transgenes been proved to have genetic stability?

Hon KIM CHANCE replied:

- 1. Yes
- 2. Commercially grown Australian bred Bollgard II cotton varieties containing the cry1Ac and cry2Ab genes from the bacterium Bacillus thuringiensis are evaluated in the trials.

These (and other related cry genes of B. thuringiensis) and their gene products (protein toxins) have been extensively tested for mammalian toxicity and allergenicity. They have been found to be safe for both animal and human consumption (Foods Standards Australia and New Zealand, Japan's Food Regulatory Authority and the US Department of Agriculture - Animal and Plant Health Inspection Service).

No link between consumption of approved GM feed and animal deaths have been substantiated, despite investigation of such reports.

3. The trials do not contain any genetic materials of the Mon810 maize event. However, similar to Mon810, the cotton contains short regulatory sequences that control expression of the introduced genes that are derived from cauliflower mosaic virus, known as the CaMV35S promoter.

The CaMV35S promoter has not been implicated in any adverse reactions. There have been suggestions that it poses a risk through gene transfer, however no adverse effects have been attributed. The CaMV organism naturally infects a wide range of food crops, such as cabbages, cauliflowers, canola and other brasica crops, and can be found in high numbers in infected cells.

The claim linking Cry1Ab expressed in GM corn to allergic disease in 39 farmers in the Philippines relates to an unpublished study and not subject to extensive scientific scrutiny. Many scientists worldwide have questioned the claim, including from the Philippine National Institutes of Health. Similar symptoms have been reported in areas where the GM corn was not grown. There have been no documented cases of allergic reactions after 7 years of commercial production of the same GM corn in countries including the USA, Canada, Argentina and Spain.

- 4. As indicated, Bollgard II cotton varieties contain the cry1Ac and cry2Ab genes from the bacterium Bacillus thuringiensis.
- 5. Bollgard II cotton varieties use the common promoter CaMV35S.
- 6. The Office of the Gene Technology Regulator has found the transgenes to be highly stable over many generations. More than 200 scientific references were considered in reaching the conclusion of the risk assessment for these GM cottons.